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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,009	07/25/2001	Janne Linkola	2132-49PCON	5161

7590

07/26/2004

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EXAMINER

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ART UNIT

PAPER NUMBER

2686

DATE MAILED: 07/26/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,009

Applicant(s)

Linkola

Examiner

Rafael Perez-Gutierrez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. This Action is in response to Applicant's resubmission of preliminary amendment filed on May 12, 2004. **Claims 1-16** are still pending in the present application. **This Action is made NON-FINAL.**

Response to Preliminary Amendment

2. The preliminary amendment originally filed on January 28, 2003 and resubmitted on May 12, 2004 has been entered in the application file. The amendment corrects the priority information of the present application to indicate that the present application is a continuation application of PCT/FI00/00046, filed on January 20, 2000. However, and although the priority claim is acknowledged by the Examiner, the priority date is not granted because there is no evidence of record indicating that the international application was copending at the time of filing of the present application. See MPEP 1895.

As acceptable evidence, the Examiner suggests the filing of at least a certification from Applicant stating that neither the international application nor the designation of the United States was withdrawn or considered to be withdrawn prior to the filing date of the present application and proof of filing a demand electing the United States within 19 months of the earliest priority date of the international application. Additionally, and for expedite prosecution and examination of the present application, the Examiner suggests Applicant to file at least a new declaration that includes the correct priority claims, a copy of the international application, and a

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certified copy of the Finish application.

Finally, the previous rejections made in view of **Allison et al. (U.S. Patent Application Publication # 2003/0003930 A1)** are valid and further maintained by the Examiner because, as explained above, the priority date is not granted.

Priority

3. Acknowledgment is made of Applicant's claim for foreign priority based on an application filed in Finland on January 25, 1999. It is noted, however, that Applicant has not filed a certified copy of the 990135 application as required by 35 U.S.C. 119(b).

Drawings

4. New formal drawings are required in this application. See the Notice of Draftsperson's Patent Drawing Review included with the first Office Action for appropriate corrections.

5. Corrected drawing sheets are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

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accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. If a response to the present Office Action fails to include proper drawing corrections, corrected drawings or arguments therefor, the response can be held **NON-RESPONSIVE** and/or the application could be **ABANDONED** since the corrections to the drawings are no longer held in abeyance.

Claim Objections

6. **Claim 12** is objected to because of the following minor informality: On **lines 2 and 3**, replace “predetermined short message destination number” with --predetermined destination number of the short message-- in order to provide consistency in the language that was previously recited in **claim 9**. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

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U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claims 1-6, 8-14, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant's admission of prior art in view of Allison et al. (U.S. Patent Application

Publication # 2003/0003930 A1), as applied in the first Office Action.

Consider **claims 1-3**, the preamble of claim 1 is considered admitted prior art because claim 1 is a Jepson-type claim (see MPEP 2129), therefore, Applicant's admission of prior art discloses in a method for routing a short a message into a data network in a telecommunication system that includes a mobile communication network to which the data network is connected, a telecommunication terminal connected to the mobile communication network, and a first short message service center connected to the mobile communication network and defined in the telecommunication terminal for use by the telecommunication terminal in connection with short messaging, and wherein a short message addressed to a predetermined destination number is routed from the telecommunication terminal to the first short message service center, a mobile switching center in a numerical range of the mobile communication network is determined from the predetermined destination number of the addressed short message, and the short message is routed in Mobile Terminated format from the first short message service center to the predetermined destination number.

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However, Applicant's admission of prior art fails to disclose the steps of:

routing the short message from the first short message service center to a converter component based on the predetermined destination number which refers to the converter component and which is in the numerical range of the mobile communication network; and

routing the short message from the converter component into the data network, wherein the converter component is disposed at a network address corresponding to the mobile switching center (claim 2) and

wherein the data network is connected to the converter component (claim 3).

In the same field of endeavor, Allison et al. clearly show and disclose a method for routing a short message into an IS-41 data network (figure 1) including the steps of:

routing the short message from a GSM short message service center (GSM SMSC) 108 (first short message service center) (figure 1) to a routing node 100 (converter component) (figure 1) based on a dialed number (predetermined destination number) which refers to the routing node 100 (converter component) (figure 1) and which is in the numerical range of the mobile communication network (i.e., dialed number corresponds to the numbering scheme used in the network) (figure 1, paragraph 0009 line 1 - paragraph 0010 line 4, and paragraphs 0019 and 0025-0029); and

routing the short message from the routing node 100 (converter component) (figure 1) into the IS-41 data network (paragraphs 0010, 0019, 0030-0032, 0042, and 0043),

wherein the routing node 100 (converter component) is disposed at a network address corresponding to a mobile switching center (MSC) (i.e., an MSC ID is inserted in a message to

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make the routing node 100 (converter component) simulate/appear as an MSC) (paragraph 0009 lines 11-23 and paragraphs 0021, 0027, 0028, 0030, and 0042), and

wherein the IS-41 data network is connected to the routing node 100 (converter component) (figure 1 and paragraph 0043).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the step of routing the short message to routing node 100 (converter component) as taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting the short messages in the routing node 100 (converter component) which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

Consider **claim 4**, and **as applied to claim 1 above**, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose the further step of converting, in the converter component, the predetermined destination number of the short message into a second destination number that refers to the data network.

Nonetheless, Allison et al. further disclose the step of matching, in the routing node 100 (converter component) (figure 1), the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (figure 1) (second destination number) that refers to the IS-41 data network (paragraph 0027) (reads on the claimed step of converting since from this step forward the routing of the short message is performed using the address/ID of the IS-41 SMSC 110 (second destination number) (figure 1

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and paragraphs 0028-0043) which is equal to the specification of present application (see, e.g., page 6 lines 13-19 and page 16 lines 10-12)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the step of converting, in the routing node 100 (converter component), the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (second destination number) that refers to the IS-41 data network as taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting, in the routing node 100 (converter component), the destination number of the short message into a second destination number which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

Consider **claims 5 and 6**, the preamble of claim 5 is considered admitted prior art because claim 5 is a Jepson-type claim (see MPEP 2129), therefore, Applicant's admission of prior art discloses in a method for routing a short a message into a data network in a telecommunication system that includes a mobile communication network, a telecommunication terminal connected to the mobile communication network, and a first short message service center connected to the mobile communication network and defined in the telecommunication terminal for use by the telecommunication terminal in connection with short messaging, and a second short message service center to which the data network is connected, and wherein a short message addressed to a predetermined destination number is routed from the telecommunication

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terminal to the first short message service center, a mobile switching center in a numerical range of the mobile communication network is determined from the predetermined destination number of the addressed short message, and the short message is routed in Mobile Terminated format from the first short message service center to the predetermined destination number.

However, Applicant's admission of prior art fails to disclose the steps of:

routing the short message from the first short message service center to a converter component based on the predetermined destination number which refers to the converter component and which is in the numerical range of the mobile communication network;

converting, in the converter component, the Mobile Terminated format short message into a Mobile Originated format short message; and

routing the converted short message from the converter component to the second short message service center,

wherein the converter component is disposed at a network address corresponding to the mobile switching center (claim 6).

In the same field of endeavor, Allison et al. clearly show and disclose a method for routing a short message into an IS-41 data network (figure 1) including the steps of:

routing the short message from a GSM short message service center (GSM SMSC) 108 (first short message service center) (figure 1) to a routing node 100 (converter component) (figure 1) based on a dialed number (predetermined destination number) which refers to the routing node 100 (converter component) (figure 1) and which is in the numerical range of the mobile communication network (i.e., dialed number corresponds to the numbering scheme used

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in the network) (figure 1, paragraph 0009 line 1 - paragraph 0010 line 4, and paragraphs 0019 and 0025-0029);

converting, in the routing node 100 (converter component), the Mobile Terminated format short message into a Mobile Originated format short message (paragraphs 0010, 0029-0032, 0042, and 0043); and

routing the converted short message from the routing node 100 (converter component) (figure 1) to an IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1, paragraphs 0010, 0029-0032, 0042, and 0043),

wherein the routing node 100 (converter component) is disposed at a network address corresponding to a mobile switching center (MSC) (i.e., an MSC ID is inserted in a message to make the routing node 100 (converter component) simulate/appear as an MSC) (paragraph 0009 lines 11-23 and paragraphs 0021, 0027, 0028, 0030, and 0042).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the step of routing the short message to routing node 100 (converter component) as taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting the short messages in the routing node 100 (converter component) which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

Consider **claim 8**, and **as applied to claim 5** above, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose the further step of routing, from the

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second short message service center to the first short message service center, via the converter component, an acknowledgement message in response to receipt of the Mobile Terminated format short message by the second short message service center.

Nonetheless, Allison et al. further disclose the step of routing, from the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1) to the GSM short message service center (GSM SMSC) 108 (first short message service center) (figure 1), via the routing node 100 (converter component), an acknowledgement message (i.e., an IS-41 SMDPP Return Result Message received from the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1) and converted to an acknowledgement message in routing node 100 (converter component)) in response to receipt of the Mobile Terminated format short message by the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1 and paragraphs 0043-0052).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the step of routing an acknowledgement message, via the routing node 100 (converter component), from the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) to the GSM short message service center (GSM SMSC) 108 (first short message service center) as taught by Allison et al. into Applicant's admission of prior art in order to provide a notification to the first short message service center of the delivery of the short message to the second short message service center.

Consider **claims 9-11**, the preamble of claim 9 is considered admitted prior art because claim 9 is a Jepson-type claim (see MPEP 2129), therefore, Applicant's admission of prior art

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discloses in a system for routing a short a message into a data network in a telecommunication system that includes a mobile communication network to which the data network is connected, a telecommunication terminal connected to the mobile communication network, and a first short message service center connected to the mobile communication network and defined in the telecommunication terminal for use by the telecommunication terminal in connection with short messaging, and wherein a short message addressed to a predetermined destination number is routed from the telecommunication terminal to the first short message service center, a mobile switching center in a numerical range of the mobile communication network is determined from the predetermined destination number of the addressed short message, and the short message is routed in Mobile Terminated format from the first short message service center to the predetermined destination number.

However, Applicant's admission of prior art fails to disclose:

a converter component connected to the mobile communication network and referred to by a destination number in the numerical range of the mobile communication network;

means for routing the short message from the first short message service center to the converter component based on the predetermined destination number which refers to the converter component; and

means for routing the short message from the converter component into the data network, wherein the converter component is located at a network address corresponding to the mobile switching center (claim 10) and

wherein the data network is connected to the converter component (claim 11).

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In the same field of endeavor, Allison et al. clearly show and disclose a system for routing a short message into an IS-41 data network (figure 1) including:

a routing node 100 (network component) (figure 1) connected to the mobile communication network and referred to by a dialed number (destination number) in the numerical range of the mobile communication network (i.e., dialed number corresponds to the numbering scheme used in the network) (figure 1, paragraph 0009 line 1 - paragraph 0010 line 4, and paragraphs 0019 and 0025-0029);

a routing element 102 (means for routing) (figure 1) for routing the short message from a GSM short message service center (GSM SMSC) 108 (first short message service center) (figure 1) to the routing node 100 (figure 1) based on the dialed number (predetermined destination number) which refers to the routing node 100 (converter component) (figure 1, paragraph 0009 line 1 - paragraph 0010 line 4, and paragraphs 0019, 0023, and 0025-0029); and

the routing element 102 (means for routing) (figure 1) routing the short message from the routing node 100 (converter component) (figure 1) into the IS-41 data network (paragraphs 0010, 0019, 0030-0032, 0042, and 0043),

wherein the routing node 100 (converter component) is disposed at a network address corresponding to a mobile switching center (MSC) (i.e., an MSC ID is inserted in a message to make the routing node 100 (converter component) simulate/appear as an MSC) (paragraph 0009 lines 11-23 and paragraphs 0021, 0027, 0028, 0030, and 0042), and

wherein the IS-41 data network is connected to the routing node 100 (converter component) (figure 1 and paragraph 0043).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the routing node 100 (converter component) taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting the short messages in the routing node 100 (converter component) which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

Consider **claim 12**, and **as applied to claim 9 above**, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose that the converter component comprises means for converting the predetermined destination number of the short message into a second destination number that refers to the data network.

Nonetheless, Allison et al. further disclose means for matching (not shown), in the routing node 100 (converter component) (figure 1), for matching the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (figure 1) (second destination number) that refers to the IS-41 data network (paragraph 0027) (reads on the claimed means for converting since from this point forward the routing of the short message is performed using the address/ID of the IS-41 SMSC 110 (second destination number) (figure 1 and paragraphs 0028-0043) which is equal to the specification of present application (see, e.g., page 7 lines 19-21 and page 16 lines 10-12)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the means for converting, in the routing node 100 (converter component), the dialed number (predetermined destination number) of the short

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message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (second destination number) that refers to the IS-41 data network as taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting, in the routing node 100 (converter component), the destination number of the short message into a second destination number which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

Consider **claims 13 and 14**, the preamble of claim 13 is considered admitted prior art because claim 13 is a Jepson-type claim (see MPEP 2129), therefore, Applicant's admission of prior art discloses in a system for routing a short a message into a data network in a telecommunication system that includes a mobile communication network, a telecommunication terminal connected to the mobile communication network, and a first short message service center connected to the mobile communication network and defined in the telecommunication terminal for use by the telecommunication terminal in connection with short messaging, and a second short message service center to which the data network is connected, and wherein a short message addressed to a predetermined destination number is routed from the telecommunication terminal to the first short message service center, a mobile switching center in a numerical range of the mobile communication network is determined from the predetermined destination number of the addressed short message, and the short message is routed in Mobile Terminated format from the first short message service center to the predetermined destination number.

However, Applicant's admission of prior art fails to disclose:

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a converter component connected to the mobile communication network and referred to by the predetermined destination number in the numerical range of the mobile communication network, said converter component comprising means for converting the Mobile Terminated format short message into a Mobile Originated format short message and means for sending the converted short message to the second short message service center,

wherein the converter component is located at a network address corresponding to the mobile switching center (claim 14).

In the same field of endeavor, Allison et al. clearly show and disclose a system for routing a short message into an IS-41 data network (figure 1) including:

a routing node 100 (converter component) (figure 1) connected to the mobile communication network and referred to by a dialed number (predetermined destination number) in the numerical range of the mobile communication network (i.e., dialed number corresponds to the numbering scheme used in the network) (figure 1, paragraph 0009 line 1 - paragraph 0010 line 4, and paragraphs 0019 and 0025-0029), said routing node 100 (converter component) (figure 1) comprising a converter 104 (means for converting) (figure 1) for converting the Mobile Terminated format short message into a Mobile Originated format short message (paragraphs 0010, 0029-0032, 0042, and 0043) and a routing element 102 (means for sending) (figure 1) for routing (sending) the converted short message to an IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1, paragraphs 0010, 0029-0032, 0042, and 0043),

wherein the routing node 100 (converter component) is located at a network address

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corresponding to a mobile switching center (MSC) (i.e., an MSC ID is inserted in a message to make the routing node 100 (converter component) simulate/appear as an MSC) (paragraph 0009 lines 11-23 and paragraphs 0021, 0027, 0028, 0030, and 0042).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the routing node 100 (converter component) taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting the short messages in the routing node 100 (converter component) which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

Consider **claim 16**, and **as applied to claim 13 above**, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose means for routing an acknowledgement message from the second short message service center to the first short message service center via the converter component to thereby provide to the first short message service center an acknowledgement in response to receipt of the Mobile Terminated format short.

Nonetheless, Allison et al. further disclose that the routing element 102 (means for routing) (figure 1) routes an acknowledgement message (i.e., an IS-41 SMDPP Return Result Message received from the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1) and converted to an acknowledgement message in routing node 100 (converter component)) from the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1) to the GSM short message service center (GSM SMSC) 108 (first short message service center) via the routing node 100 (converter

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component) to thereby provide an acknowledgement in response to receipt of the Mobile Terminated format short message (figure 1 and paragraphs 0043-0052).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further have the routing element 102 (means for routing) routing an acknowledgement message, via the routing node 100 (converter component), from the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) to the GSM short message service center (GSM SMSC) 108 (first short message service center) as taught by Allison et al. into Applicant's admission of prior art in order to provide a notification to the first short message service center of the delivery of the short message to the second short message service center.

9. **Claims 7 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicant's admission of prior art in view of Allison et al. (U.S. Patent Application Publication # 2003/0003930 A1), as applied to claims 5 and 13 above, and further in view of Lumme et al. (U.S. Patent # 6,587,693 B1), as applied in the first Office Action.**

Consider **claim 7, and as applied to claim 5 above**, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose wherein the data network is connected to the second short message service center and the further step of converting, in the converter component, the predetermined destination number of the short message into a second destination number that refers to the second short message service center and a third destination number in the data network.

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Nonetheless, Allison et al. also disclose that the IS-41 data network is connected to the IS-41 short message service center (IS-41 SMSC) 110 (second short message service center) (figure 1 and paragraph 0043) and the further step of matching, in the routing node 100 (converter component) (figure 1), the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (figure 1) (second destination number that refers to the second SMCS) (paragraph 0027) (reads on the claimed step of converting since the routing of the short message is performed using the address/ID of the IS-41 SMSC 110 (second destination number) (figure 1 and paragraphs 0028-0043) which is equal to the specification of present application (see, e.g., page 6 lines 13-19 and page 16 lines 10-12)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to also connect the IS-41 data network to the IS-41 SMSC 110 and further incorporate the step of converting, in the routing node 100 (converter component), the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (second destination number that refers to the second SMSC) as taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting, in the routing node 100 (converter component), the destination number of the short message into a second destination number which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

However, Applicant's admission of prior art, as further modified by Allison et al. above,

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fails to specifically disclose also converting, in the converter component, the predetermined destination number of the short message into a third destination number in the data network.

In the same of endeavor, Lumme et al. clearly show and discloses a method for routing short messages into the Internet 12 (data network) (figure 1) in which a short message service center SMSC (converter component) (figure 1) converts a virtual number (predetermined destination number) of a short message into an Internet address (third destination number) in the Internet (data network) (abstract, figure 1, column 1 lines 64-67, column 2 lines 7-14, column 2 lines 33-41, column 3 lines 5-19, and column 6 lines 28-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the step of converting, in the routing node 100 (converter component), the virtual (dialed) number (predetermined destination number) of the short message to an Internet address (third destination number) in the Internet (data network) as taught by Lumme et al. into Applicant's admission of prior art, as further modified by Allison et al. above, in order to provide an alternative direct route, by converting the virtual number to an Internet address, for routing short messages between subscribers of disparate networks. Such feature provides a flexible addressing mechanism which can be incorporated relatively easy into both Mobile Originated and Mobile Terminated short messages (Lumme et al.; column 2 lines 33-41).

Consider **claim 15**, and **as applied to claim 13 above**, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose that the converter component further comprises means for converting the predetermined destination number of the short

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message into a second destination number that refers to the second short message service center and to a third destination number in the data network.

Nonetheless, Allison et al. further disclose means for matching (not shown), in the routing node 100 (converter component) (figure 1), for matching the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (figure 1) (second destination number that refers to the second SMSC) (paragraph 0027) (reads on the claimed means for converting since the routing of the short message is performed using the address/ID of the IS-41 SMSC 110 (second destination number) (figure 1 and paragraphs 0028-0043) which is equal to the specification of present application (see, e.g., page 7 lines 19-21 and page 16 lines 10-12)).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the means for converting, in the routing node 100 (converter component), the dialed number (predetermined destination number) of the short message to an address of the IS-41 short message service center (IS-41 SMSC) 110 (second destination number that refers to second SMSC) as taught by Allison et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting, in the routing node 100 (converter component), the destination number of the short message into a second destination number which appears as a conventional MSC to each of the disparate networks (Allison et al.; paragraphs 0007 and 0042).

However, Applicant's admission of prior art, as further modified by Allison et al. above, fails to specifically disclose also converting, in the converter component, the predetermined

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destination number of the short message into a third destination number in the data network.

In the same of endeavor, Lumme et al. clearly show and discloses a system for routing short messages into the Internet 12 (data network) (figure 1) in which a short message service center SMSC (converter component with means for converting) (figure 1) converts a virtual number (predetermined destination number) of a short message into an Internet address (third destination number) in the Internet (data network) (abstract, figure 1, column 1 lines 64-67, column 2 lines 7-14, column 2 lines 33-41, column 3 lines 5-19, and column 6 lines 28-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate means for converting, in the routing node 100 (converter component), the virtual (dialed) number (predetermined destination number) of the short message to an Internet address (third destination number) in the Internet (data network) as taught by Lumme et al. into Applicant's admission of prior art, as further modified by Allison et al. above, in order to provide an alternative direct route, by converting the virtual number to an Internet address, for routing short messages between subscribers of disparate networks. Such feature provides a flexible addressing mechanism which can be incorporated relatively easy into both Mobile Originated and Mobile Terminated short messages (Lumme et al.; column 2 lines 33-41).

Conclusion

10. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Crystal Park II
2021 Crystal Drive
Arlington, VA 22202
Sixth Floor (Receptionist)

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (703) 308-8996. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700 or call customer service at (703) 306-0377.


Rafael Perez-Gutierrez
R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER

July 26, 2004